

REMARKS

By the present amendment, Applicant has amended independent claims 1, 7, and 12. Claims 1-14 remain pending.

In the June 21, 2007 Office Action¹, the Examiner rejected claims 1, 6, 7, 10, and 12 under 35 U.S.C § 112, first paragraph as failing to comply with the written description requirement; rejected claims 1-14 under 35 U.S.C § 101 as being directed to non-statutory subject matter; rejected claims 1-7, 11, and 12 under 35 U.S.C § 102(b) as being anticipated by "Semantic Mediation for Cooperative Spatial Information Systems: The AMUN Data Model," to Leclercq et al. ("Leclercq"); rejected claims 9 and 10 under 35 U.S.C § 103(a) as being unpatentable over *Leclercq* in view of U.S. Patent No. 5,960,200 to Eager et al. ("Eager"); and rejected claims 8, 13, and 14 under 35 U.S.C § 103(a) as being unpatentable over *Leclercq* in view of U.S. Published Patent Application No. 2002/0099563 to Adendorff et al. ("Adendorff"). Applicant traverses each of the Examiner's rejections. In addition, Applicant would like to thank the Examiner for the August 2, 2007 interview with Applicant's representative, and note that no agreement was reached.

I. Rejection of Claims 1, 6, 7, and 12 under 35 U.S.C § 112, first paragraph

Applicant respectfully traverses the rejection of claims 1, 6, 7, 10, and 12 under 35 U.S.C § 112, first paragraph for allegedly failing to comply with the written

¹ As Applicant's remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicant's silence as to certain assertions or requirements applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, etc.) is not a concession by Applicant that such assertions are accurate or such requirements have been met, and Applicant reserves the right to analyze and dispute such in the future.

description requirement by “contain[ing] subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” (Office Action, page 2, ¶ 4).

Applicant notes that “[t]o satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention,” (MPEP § 2163, emphasis added). Furthermore, “[i]t is now well accepted that a satisfactory description may be in the claims or any other portion of the originally filed specification.” *Id.*

The Examiner first alleged that the phrase “semantically grouped solution identification rules” as recited in claims 1, 7, and 12, fails to comply with the written description requirement. However, examples of this feature are clearly provided in Applicant’s disclosure, such as, for example, in ¶ [052] of the specification.

The Examiner next alleged that the phrase “a sequential order, a hierarchical order, and a dynamically adaptive order” as recited in claims 1, 7, and 12, fails to comply with the written description requirement. However, these features were disclosed in Applicant’s original claim 8 and, therefore, were part of the original disclosure. “There is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed, *Wertheim*, 541 F.2d at 262, 191 USPQ at 96.” *Id.* Applicant further notes that the Examiner did not raise the rejection when originally examining claim 8. Finally, examples of these features are provided in

Applicant's disclosure, for example, at ¶¶ [053]-[057] of the specification, as well as Figure 6.

The Examiner next alleges that the phrase, "wherein the service system returns solutions that solve the problem indirectly by being further knowledge representations for a further inference module operating for the main system," recited in claims 6 and 12, fails to comply with the written description requirement because "[t]here is no explanation how the invention solves a problem indirectly." (Office Action, page 4). However, both the claim language and ¶ [0100] of Applicant's specification recite that this is done "by being further knowledge representations for a further inference module operating for the main system," (emphasis added).

The Examiner last alleges that the phrase "allows analysis by an expert system in the further computer," recited in claim 10, fails to comply with the written description requirement. The Examiner argues that "[t]here needs to be a specific 'expert system' disclosed due to the fact there is are numerous types with specific advantages to each one," (Office Action, page 4). Applicant disagrees, and note that there is no such requirement in 35 U.S.C § 112, first paragraph.

Therefore, Applicant submits that in view of the specification, one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. Accordingly, the Examiner should withdraw the rejection of claims 1, 6, 7, 10, and 12 under 35 U.S.C § 112, first paragraph.

II. Rejection of Claims 1-14 under 35 U.S.C § 101

Applicant respectfully traverses the rejection of claims 1-14 under 35 U.S.C § 101 for being directed to non-statutory subject matter. The Examiner alleges that the claimed invention is not limited to a substantial practical application and does not produce a real world result (Office action, page 5).

Although Applicant respectfully disagrees, in order to expedite prosecution, Applicant has amended independent claim 1 to recite "a main computer system" and "a remote service computer system," as elements of the system. Applicant submits that these two elements, along with the claimed functionality, constitutes a real world result and substantial practical application. Applicant has also amended independent claim 7 to recite, "applying the identified solutions to solve the problem identified in the main system by changing the state of memory in the main system." Applicant submits that this also constitutes a real world result and substantial practical application.

Accordingly, the Examiner should withdraw the rejection of claims 1-14 under 35 U.S.C § 101.

III. Rejection of Claims 1-7, 11, and 12 under 35 U.S.C § 102(b)

Applicant respectfully traverses the rejection of claims 1-7, 11, and 12 under 35 U.S.C § 102(b) as being anticipated by *Leclercq*. In order to properly establish anticipation under 35 U.S.C. § 102, the Court of Appeals for the Federal Circuit has held that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."

Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as

complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). See also M.P.E.P. § 2131. Here, *Leclercq* does not teach or suggest each and every element of the claims.

For example, *Leclercq* fails to teach or suggest at least, "a remote service computer system for evaluating problems in the main system, comprising," *inter alia*, "an inference module to process problem related data with knowledge representations to identify solutions and forward the solutions through the service module to the main computer system," as recited by independent claim 1.

Instead, *Leclercq* appears to be generally directed to "designing interoperable systems in which collections of autonomous and heterogeneous information systems [i.e. global information systems (GIS)] can cooperate to carry out tasks," (*Leclercq*, § 1, ¶ 1, lines 2-4; and Abstract). Furthermore, *Leclercq* purports to "address several key issues regarding how contexts can be represented and used to capture semantics of concepts of different sources, and how semantic similarities between objects can be detected and used to reconcile discrepancies" (Introduction, ¶ 3, lines 15-19). The Examiner appears to allege that these discrepancies between data from different GIS sources, and the access of semantically different data from one GIS to another, constitutes the claimed "problem related data," (Office Action, page 8). However, this is incorrect because *Leclercq*'s GIS data is not "problem related data representing a problem identified about data in the main system," as recited by claim 1 (emphasis added). The GIS data is not "representing" an incompatibility [alleged "problem"] as claimed. Instead, it is only data related to its GIS.

Furthermore, *Leclercq* discloses an ISIS mediation approach, “which may help some of the requirements of GIS interoperability,” (*Leclercq*, § 3, ¶ 1, lines 2-3). This is accomplished first by a wrapper level, “whose main task is to facilitate external accesses,” and second by a cooperation level “which provides services and functionalities to facilitate semantic resolution and query processing,” (*Leclercq*, § 3, ¶ 2-3). The Examiner appears to allege that *Leclercq*’s wrapper level and cooperation level of a GIS that receives data constitutes the claimed “knowledge representations,” as recited by claim 1 (Office Action, page 8). The Examiner further appears to allege that a sending GIS (alleged “main computer system”), sends incompatible data (alleged “problem”) to a receiving GIS (alleged “remote service computer”), and that the receiving GIS ensures data compatibility using wrapper and cooperation levels (alleged “knowledge representations”).

However, this is incorrect at least because the receiving GIS does not “identify solutions and forward the solutions through the service module to the main computer system,” as required by independent claim 1 (emphasis added). In fact, *Leclercq* provides no “solutions” to the “problem” of data incompatibility as claimed, and the receiving GIS does not “forward” anything back to the sending GIS. Instead, *Leclercq* reconciles the differences so that one GIS can read the data of a second GIS. Accordingly, and for at least these reasons, *Leclercq* fails to teach or suggest each and every element of independent claim 1, and the rejection of claim 1 under 35 U.S.C § 102(b) should be withdrawn.

Independent claims 7 and 12, while differing in scope, comprises elements similar to those noted above with respect to independent claim 1. Accordingly, the

Examiner should withdraw the rejection of claims 7 and 12 under 35 U.S.C § 102(b) for at least the reasons discussed previously.

Claims 2-6, and 11 depend from independent claims 1 or 7 and, therefore, require all elements thereof. Accordingly the Examiner should withdraw the rejection of claims 2-6, and 11 under 35 U.S.C § 102(b) at least due to this dependence.

IV. Rejection of Claims 9 and 10 under 35 U.S.C § 103(a)

Applicant respectfully traverses the rejection of claims 9 and 10 under 35 U.S.C § 103(a) as being unpatentable over *Leclercq* in view of *Eager* because no *prima facie* case of obviousness has been established. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See M.P.E.P. § 2142, 8th Ed., Rev. 5 (August 2006). Moreover, "in formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed." USPTO Memorandum from Margaret A. Focarino, Deputy Commissioner for Patent Operations, May 3, 2007, page 2. Here, no *prima facie* case of obviousness has been established at least because the cited references fail to teach or suggest each and every element of the claims.

Claims 9 and 10 depend from independent claim 7 and, therefore, require all elements thereof. As discussed previously, *Leclercq* fails to teach or suggest each and every element of independent claim 7.

Eager does not cure the deficiencies of *Leclercq*. That is, *Eager* fails to teach or suggest at least “a remote service computer system for evaluating problems in the main system, comprising,” *inter alia*, “an inference module to process problem related data with knowledge representations to identify solutions and forward the solutions through the service module to the main computer system,” as recited by independent claim 1. Therefore, *Leclercq* and *Eager*, whether taken alone or in combination, fail to establish a *prima facie* case of obviousness with respect to claims 9 and 10 at least to their dependence. Accordingly, the Examiner should withdraw the rejection of claims 9 and 10 under 35 U.S.C § 103(a).

V. Rejection of Claims 8, 13, and 14 under 35 U.S.C § 103(a)

Claims 8, 13, and 14 depend from independent claims 1 or 7 and, therefore, require all elements thereof. As discussed previously, *Leclercq* fails to teach or suggest each and every element of independent claims 1 and 7.

Adendorff does not cure the deficiencies of *Leclercq*. That is, *Adendorff* fails to teach or suggest at least “a remote service computer system for evaluating problems in the main system, comprising,” *inter alia*, “an inference module to process problem related data with knowledge representations to identify solutions and forward the solutions through the service module to the main computer system,” as recited by independent claim 1. Therefore, *Leclercq* and *Adendorff*, whether taken alone or in combination, fail to establish a *prima facie* case of obviousness with respect to claims 8, 13, and 14 at least due to their dependence. Accordingly, the Examiner should withdraw the rejection of claims 8, 13, and 14 under 35 U.S.C § 103(a).

CONCLUSION

In view of the foregoing, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: August 20, 2007

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